CLAIMS

1. A method for generating an avatar animation transform, comprising:

providing a neutral-face front head image and a side head image for generating an avatar;

automatically finding head feature locations on the front head image and the side head image using elastic bunch graph matching;

automatically positioning nodes at feature locations on the front head image and the side head image; and

manually reviewing and correcting the node positions to remove artifacts and minimize distorted features in the avatar generated based on the node positions.

2. A method for generating an avatar animation transform as defined in claim 1, further comprising generating an animation transform based on the corrected node positions for the neutral face.

3. A method for generating an avatar animation transform as defined in claim 2, further comprising applying the animation transform to expression face avatar meshes for generating the avatar.

4. A method for generating an avatar animation transform as defined in claim 2, further comprising applying the animation transform to morph targets.

5. A system for generating an avatar animation transform, comprising:

means for providing a neutral-face front head image and a side head image for generating an avatar;

means for automatically finding head feature locations on the front head image and the side head image using elastic bunch graph matching;

means for automatically positioning nodes at feature locations on the front head image and the side head image; and

means for manually reviewing and correcting the node positions to remove artifacts and minimize distorted features in the avatar generated based on the node positions.

6. A system for generating an avatar animation transform as defined in claim 5, further comprising means for generating an animation transform based on the corrected node positions for the neutral face.

7. A system for generating an avatar animation transform as defined in claim 6, further comprising means for applying the animation transform to expression face avatar meshes for generating the avatar.

8. A system for generating an avatar animation transform as defined in claim 6, further comprising means for applying the animation transform to morph targets.

9. A method for generating an avatar animation transform, comprising:

providing a neutral-face front head image and a side head image for generating an avatar;

automatically finding head feature locations on the front head image and the side head image using image analysis based on wavelet component values generated from wavelet transformations of the respective neutral-face front head image and the side head image;

automatically positioning nodes at feature locations on the front head image and the side head image; and

manually reviewing and correcting the node positions to remove artifacts and minimize distorted features in the avatar generated based on the node positions.

10. A method for generating an avatar animation transform as defined in claim 9, further comprising generating an animation transform based on the corrected node positions for the neutral face.

11. A method for generating an avatar animation transform as defined in claim 10, further comprising applying the animation transform to expression face avatar meshes for generating the avatar.

12. A method for generating an avatar animation transform as defined in claim 10, further comprising applying the animation transform to morph targets.

13. A method for generating an avatar animation transform as defined in claim 9, wherein the wavelet transformations use Gabor wavelets.